

ENVIRONMENTAL STUDIES-5

1. The Basoda Platter

| EXERCISE |

- A.** 1. (c) Groundnut 2. (d) Chang
- B.** 1. Cold 2. Watermelon
3. digestion 4. Holi
5. Jaggery
- C.** 1. T, 2. F, 3. F, 4. T
- D.** 1. Bajra – (b) Kharif crop
2. Curd – (c) Good for digestion
3. Gair dance – (d) Dance to the beat of chang
4. Basoda – (a) Cold food
- E.**
1. Major dishes in the Basoda platter include bajra roti, kadhi, ker-sangri, sweet churma, curd, buttermilk, mathri, papad, and rab.
 2. Maize and bajra are Kharif crops. They grow well in warm climates with moderate rainfall and are suitable for dry regions like Rajasthan.
 3. Gair dance is a traditional Rajasthani folk dance, mainly performed by men using sticks. It is done during Holi, Sheetala Ashtami, and other celebrations to express joy.
 4. In Rajasthan:
 - **Rabi crops:** Wheat, barley, pulses
 - **Kharif crops:** Bajra, maize, groundnut
 - **Zaid crops:** Watermelon, muskmelon, cucumber
 5.
 - **Rabi:** Wheat, barley, mustard
 - **Kharif:** Rice, bajra, moong
 - **Zaid:** Cucumber, watermelon, muskmelon
 6. In our home, we prepare dal-bati-churma, gatte ki sabzi, kadhi, and gujiya during

festivals. Summer drinks like thandai and rab are also made.

7. Cold food is eaten on Sheetala Ashtami to prevent summer infections. Fermented and milk-based dishes help cool the body and aid digestion.
8. Sheetala Ashtami is also celebrated in Gujarat, Haryana, and parts of Uttar Pradesh. Different regions follow their own customs and traditions during this festival.
9. Festivals bring joy and togetherness, help us understand our culture, and promote love and harmony. They are a time to celebrate, meet loved ones, and enjoy special food and traditions.

F.

1. **Festivals and Dishes in my Region:** In my region (Uttar Pradesh/Rajasthan), Diwali, Holi, Raksha Bandhan, and Janmashtami are celebrated. Dishes like gujiya, puri-aloo, kheer, mathri, and churma are prepared.

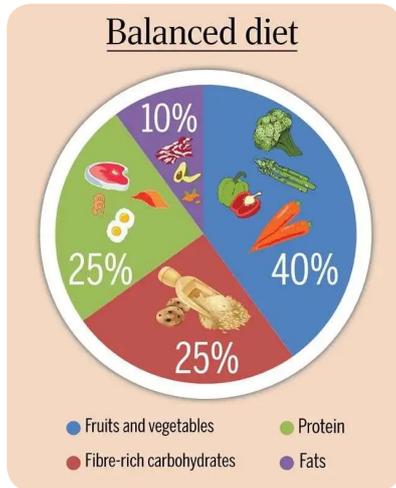
2. **Comparative Chart of Crops:**

Rajasthan	Other States
Bajra, moong, barley,	Rice (West Bengal), jute (Bihar)
groundnut, wheat	Tea (Assam), maize (Punjab)
pulses, sugarcane	Coconut (Kerala), ragi (Karnataka)

3. **Health Benefits of My Favourite Dish (Dal-Bati):** Dal gives protein, and bati made from wheat gives energy. It helps in muscle building and keeps the body full and active.
4. A balanced diet gives all nutrients like carbohydrates, proteins, fats, vitamins, and minerals. It keeps us healthy, strong, and prevents diseases.

4 Answer Key

5. Balanced Diet Platter



- Chapati (Carbohydrates)
 - Dal (Proteins)
 - Salad (Vitamins & Minerals)
 - Curd (Calcium, Probiotics)
 - Fruits (Vitamins)
 - Ghee (Fats)
6. Do yourself.
7. Do yourself.
8. Responsibilities During a Fair:
- Follow rules and respect others
 - Don't litter or damage property
 - Take care of your things
 - Stay safe and with elders
9. **Traditional Festival Story:** During Holi, we remember the story of Prahlad and Holika. Prahlad's devotion to God saved him, and Holika was burnt, showing good wins over evil.

| ADDITIONAL QUESTIONS |

- A. 1. (d), 2. (b), 3. (c), 4. (a), 5. (c).
- B. 1. intensive, 2. Bundi, 3. junk, 4. Sheetala Ashtami.
- C. 1. True, 2. False, 3. False, 4. True
- D. 1. (d), 2. (e), 3. (a), 4. (b), 5. (c).

2. Animals and Birds- Our Friends

| EXERCISE |

- A. 1. Dog (d)
2. Cat (c)
3. Mouse (b)
4. Elephant (a)
- B. 1. hole 2. long trunk
3. snake 4. the tree
- C.
1. If all the water in the forest disappears, it would be a disaster for the animals. Just like us, they need water to live. Without it, they'd become severely dehydrated and could even die.
 2. If we cut down all the trees, birds would have nowhere to go! Trees are their homes, where they build their nests, find their food, and stay safe. Without trees, they'd really struggle to survive.

| ADDITIONAL QUESTIONS |

- A. 1. (a), 2. (c), 3. (d), 4. (b), 5. (c).
- B. 1. mooing, 2. aquarium, 3. eggs, 4. solitary.
- C. 1. False, 2. True, 3. True, 4. False.
- D. 1. (d), 2. (e), 3. (b), 4. (c), 5. (a).

3. Our Efficient Helpers

| EXERCISE |

- A. 1. confectioner
2. Rabi
3. local goods
4. music
5. rabi, kharif
6. milk, ghee, sugar, flour
7. furniture, stages
8. clay, environment
9. flour, vegetable, fruits and spices

10. wedding venue, surroundings
- B.** 1. F
2. T
3. F
4. T
5. T
- C.** 1. Confectioner — (c)
2. Farmer — (d)
3. Carpenter — (a)
4. Livestock keeper — (b)
- D.** 1. Tailor
2. Farmer
3. Cleaner
4. Confectioner
5. Potter
6. Carpenter
7. Electrician
- E.** 1. • Confectioner
• Potter
• Carpenter
• Cleaner
2. • They are eco-friendly
• They are biodegradable
• Keeps rich tradition alive
3. • Sahi paneer
• Chole
• Naan
• Pani-puri
4. • Reusing items
• Recycling materials
- F.** 1. Weddings are big team efforts, not just for one family. Many people like farmers, electricians, and cooks all work together. Everyone's hard work makes the event special. It shows how much we all need one another in society.
2. Clay cups (kulhads) are good for Earth because they are natural and break down easily. They don't cause pollution. Plastic glasses, however, stay in the environment for a very long time

and create pollution. They can even be harmful if used for hot drinks.

3. At weddings, you'll find yummy foods like jalebi (a sweet made with flour and sugar) and shahi paneer (a rich cheese curry). Dal makhani (a creamy lentil dish) and breads like roti and naan are also common. You might also see snacks like pani-puri.
4. Keeping places clean is very important for everyone's health. Cleaners work hard to make sure places like wedding venues are tidy. Our job is to help them by not making messes and by throwing our trash in the right place. This helps keep everything nice and clean for everyone.
- G.** 1. The wedding venue would become very dirty, unhealthy, and unpleasant with trash and food waste everywhere.
2. Many main dishes like rotis, naans, and sweets couldn't be made. The feast would be very limited with little food for guests.
3. There would be no lights, fans, or sound system. The wedding would be dark, uncomfortable, and lack its festive feel.
4. He wouldn't be able to prepare any sweets or many dishes. There would be no yummy treats for the guests.
5. The wedding would be incomplete and disorganized. It wouldn't feel special or joyful because everyone's help is needed for its success.

H. Project Work :

Do yourself.

| ADDITIONAL QUESTIONS |

- A.** 1. (d), 2. (d), 3. (b), 4. (d), 5. (a).
B. 1. livestock, 2. Environment, 3. carpenter, 4. nutrients.
C. 1. True, 2. True, 3. False, 4. True.
D. 1. (c), 2. (d), 3. (e), 4. (a), 5. (b).

6 Answer Key

4. Means of Transport and Communication

| EXERCISE |

- A.** 1. Road transport — (c)
2. Rail transport — (b)
3. Water transport — (a)
4. Air transport — (d)
- B.** 1. Postal service — (a)
2. Telephone and mobile — (b)
3. Internet — (d)
4. Radio and television — (c)
- C.** 1. (b) Ship
2. (a) Following traffic rules
- D.** 1. water transport
2. Internet
3. helmet
- E.** 1. To avoid traffic jams, people should follow traffic rules, avoid peak travel times, use carpooling, and behave responsibly on the road. Public awareness campaigns, better traffic management, and use of technology can also help reduce traffic jams.
2. For safe use of the Internet, one should never share personal information with strangers online and avoid spreading fake news or messages on social media.
- F.** Do yourself.

| ADDITIONAL QUESTIONS |

- A.** 1. (d), 2. (d), 3. (b), 4. (c), 5. (a).
B. 1. Bicycle, 2. Water, 3. Air, 4. Red.
C. 1. False, 2. True, 3. False, 4. False.
D. 1. (c), 2. (e), 3. (d), 4. (a), 5. (b).

● We Learnt and Understood-I

- A.** 1. Dishes like Bajra roti, gatte ki sabzi, and cold food are prepared. Eating cold

and stale food on this day is believed to cool the body and build immunity as per tradition.

2. Gair dance is performed during Holi in the regions of Mewar, Marwar, and Shekhawati in Rajasthan.
3. Do yourself.
4. Do yourself.
5. Yes, we prepare cold food like roti, sabzi, and sweet dishes a day before Sheetal Saptami and eat them the next day.
6. Birds like peacock, parrot, sparrow, and pigeon are common.
• Peacock has colourful feathers,
• Parrot can mimic sounds,
• Cuckoo has a sweet voice.
7. Earlier, people used camel carts, bullock carts, and horses. Now, buses, trains, mobiles, internet, and postal services are commonly used.

B.

1. Choose the correct answer:

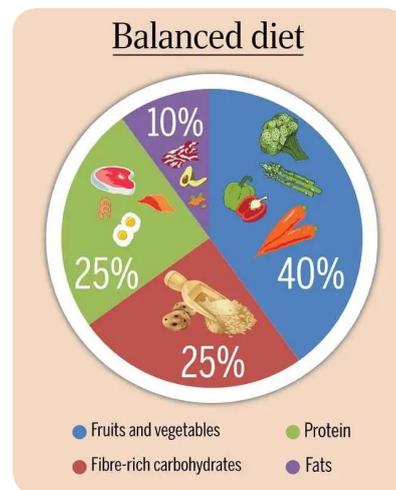
1. (b) Cold food
2. (b) Holi
3. (a) Bajra roti
4. (c) Cuckoo
5. (b) Peacock
6. (b) Non-vegetarian
7. (c) Mobile phone
2. 1. cold
2. Kharif
3. Bajra roti and buttermilk
4. chang
5. vibrant
6. sugar
7. grains, pulses
8. camel cart
9. Mobile phone
10. pigeons
3. 1. False 2. False
3. False 4. True
5. False 6. True

7. True
8. False
9. True
10. True
4.
 1. Bajra (a) Kharif crop
 2. Curd (b) Good for digestion
 3. Peacock (d) Has beautiful feathers
 4. Parrot (c) Mimics human voice
 5. Confectioner (f) Makes sweets
 6. Farmer (e) Provides grains and pulses
 7. Aeroplane (h) Travel by air
 8. Camel cart (g) Desert region
5.
 1. Bajra roti, curd, gatte ki sabzi, jaggery, and other cold items are included in the 'Basoda Platter'.
 2. There is a tradition of eating cold food on Sheetala Saptami to give rest to the stomach and build immunity during seasonal change.
 3. Rabi crops – wheat, mustard; Kharif crops – bajra, jowar.
 4. Do yourself.
 5. The number of vultures is decreasing due to pollution, habitat loss, and harmful chemicals in the dead bodies of animals.
 6. Peacock, parrot, cuckoo, vulture, heron are major birds found in Rajasthan.
 7. A farmer provides food and raw materials, which support traders, confectioner, and transporters in the village.
 8. If traffic rules are not followed, it can lead to accidents, traffic jams, and chaos on roads.
 9. Transport and communication help in movement of people and goods, and allow sharing of information, making life faster and easier.

C. Do It Yourself :

1. One major festival celebrated in our village is Diwali.

2. Traditional dishes prepared during Diwali include besan laddoo, puri, kachori, and dal bati churma.
3. Major crops grown in our region: wheat, mustard, bajra, gram, and jowar.
4.
 - Rajasthan: Bajra, wheat, mustard
 - Punjab: Wheat, rice, sugarcane
 - Haryana: Wheat, rice, cotton
 - Gujarat: Cotton, groundnut, bajra
5. Do yourself.



- Carbohydrates: Rice, roti
 - Proteins: Dal, paneer, rajma
 - Fats: Ghee, oil, milk.
 - Vitamins & Minerals: Carrot, spinach, amla, apple, orange.
 - Water: Essential for all functions
7. Do Yourself.
 8. Birds in my locality:
 - Parrot: Green feathers, red beak and mimics human voice
 - Sparrow: Small, brown, chirpy
 - Peacock: National bird, colourful feathers
 - Cuckoo: Sweet voice
 9. During their childhood, vultures, sparrows, and mynas were common. Now, their numbers have reduced due to pollution and loss of trees.
 10. Do yourself.

5. Architects of Nature

| EXERCISE |

- A.** 1. (b) on the ground
 2. (b) Sandpiper
 3. (a) butterfly
 4. (a) catching prey
 5. (d) Baya
- B.** 1. A spider makes a web by releasing silk from its mouth. It carefully weaves the web strand by strand to trap insects.
 2. Birds collect materials like twigs, grass, and leaves to build nests. Nests protect their eggs and chicks from predators, weather, and provide a safe place to grow.
 3. A woodpecker pecks into tree trunks with its sharp beak to make a hole. This hollow space becomes its nest, where it lays eggs safely.
 4. Natural shelters near school or home include tree holes, bushes, ant hills, and burrows. Animals and birds use these places for safety, rest, and protection.

| ADDITIONAL QUESTIONS |

- A.** 1. (b), 2. (d), 3. (b), 4. (b), 5. (a).
B. 1. ledges, 2. nest, 3. wax, 4. burrows.
C. 1. False, 2. True, 3. True, 4. True, 5. True.
D. 1. (c), 2. (d), 3. (b), 4. (e), 5. (a).

6. Weather and Season

| EXERCISE |

- A.** 1. (b) Warm and dry
 2. (b) Cold and humid
 3. (b) Form clouds and wind
 4. (a) Three
- B.** 1. False, 2. False, 3. True, 4. False
- C.** 1. Weather refers to the daily changes in the atmosphere, like temperature, rain, wind, etc., which can change quickly.

Season is a long-term pattern of weather that lasts for a few months, like summer, winter, or monsoon.

Weather changes every day, but seasons change gradually over time.

Seasons affect our clothing, food, and daily activities.

2. In Jaisalmer, children experienced a hot and dry climate with sandy winds.

As they moved towards Mount Abu, the weather became cooler and more humid.

They saw changes in clothing, trees and plants.

The cool breeze and green surroundings in Mount Abu were different from the desert of Jaisalmer.

3. Seasonal changes affect the behaviour and survival of plants and animals.

In winter, some animals go into hibernation, and in spring, many trees grow new leaves and flowers.

During summer, animals rust near water bodies and in monsoon, frogs become active.

- D.** 1. Seasons affect almost every part of our daily life, from the clothes we wear to the food we eat.

In summer, we prefer wearing cotton clothes and eating cold things like ice cream and juices.

In winter, we wear woollen clothes, use heaters and drink hot tea or soup.

During the rainy season, we use umbrellas and raincoats.

Festivals and holidays also depend on seasons, like Diwali in autumn and Holi in spring.

Seasonal fruits like mango in summer and oranges in winter become part of our diet.

Different seasons bring different types of diseases too — like heatstroke in summer and cough in winter.

School timings and vacations also change with the seasons.

I remember enjoying kite flying in spring and sitting around bonfires in winter.

During monsoon, I love watching rain and making paper boats.

So, seasons play a very important role in making our life interesting and colourful.

Every season brings new joys and experiences.

2. Yes, unusual changes in seasons are a serious concern for everyone. Due to climate change, winters are becoming shorter and summers are getting hotter. This irregularity affects farmers, as crops fail when rainfall or temperature is not normal. Animals and birds are also confused — migratory birds may not come at the right time. Diseases like dengue and malaria increase when rains come unexpectedly.

Unseasonal rains or heatwaves damage property and sometimes cause deaths.

Our health, food supply, and water availability are all linked with proper seasons.

(b)

Animals	Environment	Adaptation Characteristics
Camel	Desert	Hump stores fat, long eyelashes, padded feet, stores water
Polar Bear	Icy region (Arctic)	Thick fur, fat layer, white colour for camouflage
Crocodile	Water body (River, Swamp)	Strong tail, eyes above head
Monkey	Forest (Tree)	Long tail, strong limbs for jumping and climbing
Fish	Water (River, Ocean)	Fins for swimming, gills to breathe underwater
Deer	Grassland	Fast runner, sharp senses, brown body for camouflage
Elephant	Forest	Large ears to release heat, trunk for eating and drinking
Whale	Ocean	Streamlined body, breathes through blow-hole, thick blubber

Floods and droughts are becoming more frequent due to seasonal imbalance.

Even school schedules, holidays, and transportation get affected by extreme weather.

We need to take steps like planting trees, reducing pollution, and saving energy.

This will help maintain the balance of seasons and protect our future. So yes, unusual seasonal changes are a big issue and should be addressed seriously.

3. Do yourself.
4. Do yourself.

Project Work :

1. Fruits and vegetables grow as per the season.
 - **Summer:** Mango, watermelon, cucumber because these have high water content to keep the body cool.
 - **Rainy season:** Corn, ladyfinger, bottle gourd because these help fight infections and boost digestion.
 - **Winter:** Carrot, peas, cauliflower, orange, guava as these are rich in vitamins and help keep the body warm.
2. (a) Do yourself.

10 Answer Key

| ADDITIONAL QUESTIONS |

- A.** 1. (d), 2. (a), 3. (c), 4. (d), 5. (a).
B. 1. Weather, 2. monsoon, 3. Summer, 4. seasonal
C. 1. True, 2. False, 3. False, 4. True.
D. 1. (d), 2. (e), 3. (a), 4. (b), 5. (c).

7. Experiments with Water

| EXERCISE |

- A.** (a) sank
 (b) insoluble
 (c) sinks
 (d) floats
B. (a) False
 (b) True
 (c) False
 (d) True
 (e) True
C. 1. Piece of wood will float
 2. Iron pin will sink
 3. Plastic bottle will float
 4. Potato will sink
 5. Soapbox(plastic) will float

D.

Soluble	Insoluble
Sugar	Mud
Salt	Oil
Milk	Sawdust
	Chalk powder

- E.** (a) Five objects that float in water:
 (i) Plastic bottle
 (ii) Wooden stick
 (iii) Paper
 (iv) Pencil
 (v) Leaves
 (b) Five substances that dissolve in water:
 (i) Sugar

- (ii) Salt
 (iii) Glucose
 (iv) Lemon juice
 (v) Milk (partially)
 (c) Five objects that sink in water:
 (i) Iron nail
 (ii) Stone
 (iii) Metal spoon
 (iv) Coin
 (v) Potato

- F.** (a) No, a filled soapbox may not float because when the box is filled, it becomes denser than water and it will sink.
 (b) A steel plate floats because its shape helps it to displace more water. A steel nail, being small and dense with less surface area, cannot displace enough water and therefore sinks.
 (c) Wood is less dense than water, so it floats. Iron is denser than water, so it sinks.

G. (a) Experiment:

Object/ Substance	Floats / Sinks	Dissolves in water
Plastic bottle cap	Floats	No
Coin	Sink	No
Sugar	---	Yes
Salt	---	Yes
Mud	---	No
Oil	Floats	No
Turmeric	---	No

(b) Environmental Studies :

1. Because of evaporation. In summer, the heat from the sun causes water to turn into vapour, which mixes with the air, reducing the pond's water level.
 2. • Wet clothes drying on a clothesline
 • Water spilled on the floor
 • Water left in an open bowl

Cause: Heat from the sun or air causes the water to evaporate.

(c) Observation:

1. • When a cloth gets wet, it becomes heavier and darker in colour.
 - As it dries, water evaporates, and cloth becomes light and dry again.
2. • Leaf - Floats
 - Coconut shell - Floats
 - Stone - Sinks
 - Wooden stick - Floats
 - Metal Spoon - Sinks

| ADDITIONAL QUESTIONS |

- A.** 1. (c), 2. (d), 3. (c), 4. (c), 5. (a).
B. 1. soluble, 2. open, 3. dissolve, 4. stone.
C. 1. False, 2. True, 3. True, 4. False
D. 1. (c), 2. (a), 3. (b), 4. (d).

8. We Won't Let the Trees Be Cut

| EXERCISE |

Consider the problem of single-use plastic

1. Plastic causes many problems:
 - It does not decompose easily, so it stays in the environment for hundreds of years.
 - It pollutes land and water, harming animals and plants.
 - Animals can eat plastic by mistake, which can make them sick or even kill them.
 - Burning plastic releases harmful gases that pollute the air.
2. Solution:
 - Reduce the use of plastic, especially single use items like bags and bottles.
 - Reuse plastic items instead of throwing them away.

- Recycle plastic to make new things.
- Use eco-friendly alternatives like cloth bags, paper, or steel containers.
- Spread awareness about the harms of plastic.

Practical Activities

1. Five items that use single-use plastic:
 - Plastic water bottles
 - Plastic straws
 - Plastic carry bags
 - Plastic food wrappers
 - Plastic disposable cups and plates
2. We can
 - use cloth or jute bags instead of plastic bags.
 - carry steel or glass bottles.
 - use banana leaves or steel plates for serving food.
 - store food in glass or steel containers.
 - avoid straws completely.
3. Plan to reduce plastic waste (for one week):
 - Day 1: Replace plastic bags with cloth bags.
 - Day 2: Use lunch boxes and water bottles made of steel.
 - Day 3: Avoid buying plastic-wrapped snacks.
 - Day 4: Reuse any plastic containers at home.
 - Day 5: Make posters to spread awareness.
 - Day 6: Conduct a plastic-free lunch day in school.
 - Day 7: Collect and send used plastic for recycling.

Think and Write

1. Yes, we have many eco-friendly alternatives such as paper, cloth, jute, metal, and glass. These materials do

12 Answer Key

not harm the environment and can be reused or decomposed easily.

- Small changes like carrying a cloth bag, using steel bottles, or saying no to plastic straws can reduce plastic waste. If everyone makes these small efforts, it can lead to a huge reduction in pollution and protect our planet.
-

Reason	Effect on animals and birds
Animals eat plastic by mistake	causes stomach problems and can lead to death
Plastic gets stuck in their body	hurts them or blocks movement
Pollutes water bodies	affects fish, turtles, and other aquatic animals
Blocks natural food sources	makes it hard for animals to find food
Does not decompose	stays in the environment for years, harming nature

Practice 1 :

Causes of Deforestation	Cutting trees for fuel, farming, building roads, cities, factories.
Evidence of Habitat Loss	Fewer birds, empty land, no greenery, forest area turning into concrete
Animals Dependent on Trees	Monkeys, squirrels, birds, elephants, insects, herbivores.

Effects of Deforestation	Soil erosion, poor rainfall, Loss of shelters and food for animals, Desertification.
Solution of Deforestation	Plant more trees, reduce use of papers.

Practice 2 :

Do it yourself.

Conservation & Awareness Activities

Practice 3 : Plant Care and Protection

- Cutting trees, overgrazing, pollution, pests, lack of water, and forest fires.
- Small flowering plants, young saplings, and medicinal plants.
- Regular watering, fencing to protect from animals, and planting during rainy season.

Practice 4 : Experimental Activity

Do it yourself.

Practice 5 : Waste - Decomposition Test

- Plastic takes hundreds of years (around 500–1000 years) to decompose.
- In school, plastic comes from water bottles, food wrappers, pens, and bags. We can reduce its use by using steel bottles, cloth bags, and reusable containers.
- At home, plastic is mostly used in packaging, bags, bottles, kitchen containers, and toys.
- Yes, I am willing to reduce plastic use in school by carrying reusable items and avoiding single-use plastic.

Evaluate :

- Do it yourself.
- Creatures that are completely dependent on trees and plants for protection:

- Birds (like parrots, sparrows) – for nests.
- Monkeys – live on trees.
- Squirrels – hide and live in tree branches.
- Insects (like ants, caterpillars) – depend on plants for food and shelter.
- Sloths – hang and sleep on trees.

| ADDITIONAL QUESTIONS |

- A.** 1. (a), 2. (a), 3. (b), 4. (b), 5. (d).
- B.** 1. air, 2. Khejarli, 3. Non-biodegradable, 4. climate.
- C.** 1. True, 2. True, 3. True, 4. False
- D.** 1. (c), 2. (d), 3. (a), 4. (b).

● We Learnt and Understood-II

A. Oral Questions.

1. Features of Rajasthan:

- Climate:** Rajasthan is mostly hot and dry, especially in areas like Jaisalmer.
 - Difference in weather:** Mount Abu is cooler and more pleasant, while Jaisalmer is hot and dry.
 - Major Birds:** Peacock, parrot, bulbul, dove, vulture.
- Do yourself.
 - Without trees, we won't get clean air, food, shade, or shelter for animals. Life will become very difficult.
 - I would write a letter and send it through someone or go there personally if possible.
 - Camel carts and jeeps are commonly used in Rajasthan..
 - Do yourself.
 - I would visit Shimla because it is a hill station and has cold weather unlike both Mount Abu and Jaisalmer.
 - We turn off taps while brushing, collect rainwater, and use leftover water for

plants.

- Sugar and salt dissolve in water. Oil and sand do not dissolve.
 - I will inform elders, talk to neighbours, and request the local authority to stop cutting. I will also plant more trees.
 - We learn to love and protect trees. Nature is our responsibility, and we must stand up for it.
 - If forests are destroyed, animals will lose their homes, air will become polluted, rainfall will decrease, soil will become loose causing floods, and humans will face many problems like lack of clean air, food, and wood.
- Neem – used for medicine and shade
 - Peepal – gives oxygen and is worshipped
 - Mango – gives fruit and wood
 - Banyan – gives shade and homes for birds
 - Ashoka – used for decoration and medicinal value

B.

- (b) Hilly
 - (c) Twigs and grass
 - (c) To catch prey
 - (b) Electricity generation
 - (c) Salt
 - (c) Both a and b
 - (b) High temperature
 - (d) All of the above
- hot, cold
 - silk thread
 - Mount Abu
 - cold
 - tables and chairs
 - signal

14 Answer Key

- intense heat, dry
- windmills
- low
- a lid
- environment
- Amrita Devi and others

3.

- | | |
|----------------------|-----------------------|
| 1. Spider | Builds a web |
| 2. Rabbit | Makes a burrow |
| 3. Vulture | Eats dead animals |
| 4. Carpenter | Builds a canopy |
| 5. Bus | Public transport |
| 6. Mobile | Digital Communication |
| 7. Jaisalmer | Desert region |
| 8. Mount Abu | Mountain region |
| 9. Salt | Dissolve in water |
| 10. Wood | Floats in water |
| 11. Trees and plants | Provide oxygen |
| 12. Birds home | Nests |

4.

1. False, 2. False, 3. True, 4. False, 5. False, 6. True, 7. False, 8. False, 9. True, 10. False, 11. True, 12. False, 13. True.

5.

- Mount Abu has a cool climate because it is a hilly area, while Jaisalmer is hot and dry as it lies in the desert.
- Birds use twigs, grass, leaves, and feathers to build nests for laying eggs and protecting their young.
- In desert areas, houses are made with thick walls, flat roofs, and small windows to keep them cool.
- A halwai uses ingredients like flour, sugar, ghee, dry fruits, and milk to

prepare sweets during weddings.

- To reduce traffic jams, we can follow traffic rules, avoid unnecessary honking, and promote public transport.
- Sparrows help the environment by eating insects and maintaining the balance of nature.
- Electricity is important for lighting, running appliances, and supporting industries and education.
- Mount Abu was cooler than Jaisalmer, which had high temperatures during the day.
- Children observed temperature changes, different landscapes, and windmills during their journey.
- Rajasthan uses methods like stepwells, tanks, and rainwater harvesting to conserve water.
- Some substances dissolve in water due to their chemical nature, while others do not because they are insoluble.
- Cutting down trees lead to habitat loss, climate imbalance, and reduced oxygen levels.
- We should plant more trees, stop illegal logging, and spread awareness to protect forests.

9. Our Past and Present

| EXERCISE |

- A.** 1. False, 2. True, 3. True
- B.** In earlier times, people used simple sources of light like diyas, mashaals, and lanterns. Mustard oil lamps and kerosene lanterns were common in villages. There was no electricity, so these sources were the only option. Later, candles and hurricane lamps were also used. With time, electricity brought

a big change in lighting. Electric bulbs, tube lights, and CFLs became popular. Now, we mostly use LED lights which are brighter and save energy. Modern lights can be controlled using remote or smartphones. Solar lights are also used now to save electricity.

These new lights are safer, cleaner, and more convenient. Old sources of light created smoke and were less effective. New technology has made lighting more efficient and environment-friendly.

C. Do it yourself

D.

- People read at night using mustard oil diyas, kerosene oil lamps and lanterns.
- A diya uses oil and fire to give light, while a bulb uses electricity and gives brighter, smokeless light.
- The sources of light changed from oil lamps to electric bulbs and LEDs. This has made life easier, safer, and allowed us to work and study even at night.
- Do it yourself.

| ADDITIONAL QUESTIONS |

- A. 1. (c), 2. (c), 3. (b), 4. (a), 5. (c).
 B. 1. hand-fans,, 2. light, 3. almost all, 4. communication.
 C. 1. False, 2. False, 3. True, 4. False.
 D. 1. (d), 2. (c), 3. (b), 4. (e), 5. (a).

10. Map of India and Geographical Diversity

| EXERCISE |

A.

1. The Himalayas and the Trans-Himalayan ranges.
2. Punjab, Haryana, Delhi, Uttar Pradesh, Bihar, Jharkhand, West Bengal, and Assam.

3. Gujarat, Maharashtra, Goa, Karnataka, Kerala, Tamil Nadu, Andhra Pradesh, Odisha, and West Bengal.
4. Rajasthan, Gujarat, Punjab, and Haryana.
5. Godavari, Krishna, Kaveri, and Mahanadi.

B. Do it yourself.

C.

1. Advantages:

- Land is flat and fertile – good for farming.
- Easier to build houses, roads, schools, and hospitals.
- Good transportation – railways and highways are well connected.
- More job and business opportunities in cities.

Challenges:

- Plains are often overcrowded.
- Pollution levels are high in some areas.
- Floods occur during heavy rains.
- Water shortage in summers in some regions.

2. Do it yourself.

D. Do it yourself.

| ADDITIONAL QUESTIONS |

- A. 1. (c), 2. (d), 3. (c), 4. (b), 5. (b).
 B. 1. Eastern, 2. South-west, 3. Rajasthan, 4. Ganga.
 C. 1. False, 2. True, 3. False, 4. False.
 D. 1. (b), 2. (c), 3. (e), 4. (a), 5. (d).
 E. Do it yourself.

11. The Art of Map-making: Direction and Measurement

| EXERCISE |

1. Matkuli is to the South of Hansipur.
2. Matkipur is to the East of Gonda village.

16 Answer Key

3. Peepalgota is to the West of Bassi.
4. Make a map with the help of this information.
 - Start from Peepalgota.
 - Go south to Bassi.
 - From Bassi, continue to Matkuli.
 - From Matkuli, go further south to reach Matkipur.
5. Do it yourself.

| ADDITIONAL QUESTIONS |

- A.** 1. (c), 2. (c), 3. (b), 4. (c), 5. (b).
- B.** 1. 1, 2. kitchen, 3. proportional reduction,, 4. big room.
- C.** 1. False, 2. True, 3. False, 4. True.
- D.** 1. (c), 2. (d), 3. (b), 4. (a).
- C.**
- 1.

Aspect	Rural Lifestyle	Urban lifestyle
Environment	Green, open spaces	Crowded, polluted surroundings
Houses	Natural materials, eco-friendly	Concrete structures, heat-absorbing
Lifestyle	Simple, active, nature-connected	Fast-paced, technology,dependent
Pollution Level	Low	High
Resource Use	Less electricity and fresh food	More electricity and packaged food

2. They lived in mud or brick houses with thatched or tiled roofs. Thick walls and natural ventilation kept homes cool in summer and warm in winter, reducing the need for fans, coolers or heaters.
3. Modern lifestyle increases pollution, energy use, and deforestation due to vehicles, factories, packaged foods, and concrete buildings, which contributes to global warming and climate change.
4. We can reduce electricity use, avoid plastic, eat fresh home-cooked food, plant trees, use public transport, and recycle waste to reduce our impact on the environment.

12. Our Lifestyle and Climate Change

| EXERCISE |

- A.**
1. (b) Increase in temperature due to concrete buildings
 2. (b) Mud, wood and thatch
 3. (c) Pollution increases
 4. (c) Increased pollution
 5. (b) It is good both for health and the environment
- B.**
1. mud, wood and thatch
 2. pollution and heat
 3. environmental pollution, wastage
 4. droughts, floods
 5. concrete buildings

D. Answer in 8-10 sentences :

1. The Heat Island Effect is a condition where cities become much hotter than nearby rural areas. This happens because concrete buildings, roads, and lack of greenery trap heat during the day and release it slowly at night. As a result, urban areas experience higher temperatures. This also increases the use of fans, ACs, and electricity, further contributing to pollution. To prevent this, we can plant more trees, use green green rooftops and create open green spaces.

2. Our daily habits play a big role in climate change. For example, using air conditioners excessively increases electricity demand, which is often generated by burning fossil fuels. Eating packaged food leads to more plastic waste and industrial pollution. Driving private vehicles instead of using public transport increases air pollution. Modern construction with cement and concrete reduces green spaces and increases heat. All these activities release greenhouse gases, which trap heat and cause global warming. If we live mindfully, reduce waste, save energy, and prefer eco-friendly products, we can help slow down climate change.
3. Traditional houses were built using natural materials like mud, wood, thatch, and clay. They were designed to stay cool in summer and warm in winter, reducing the need for electricity. They blended with nature and had proper ventilation. Modern houses are made of cement, glass, and concrete, which absorb and trap heat. They often rely on fans, coolers, or ACs to maintain temperature. Traditional houses are more eco-friendly because they use fewer industrial resources, produce less pollution, and work with nature rather than against it. They are also better suited to local climates and reduce energy consumption.
4. Our eating habits greatly influence the environment. Consuming more packaged and processed food increases plastic waste and requires more energy for production and transportation. These foods often come from factories that release harmful gases. On the other hand, eating fresh, locally grown food reduces pollution and supports local farmers. Cooking

at home uses less energy compared to industrial food production. So, by choosing healthy, home-cooked meals and reducing food waste, we can help reduce the impact on climate change.

E. Do it yourself

ADDITIONAL QUESTIONS

- A. 1. (c), 2. (b), 3. (b), 4. (c), 5. (b).
- B. 1. mud, 2. packaged, 3. greenhouse, 4. LED.
- C. 1. True, 2. False, 3. False, 4. True.
- D. 1. (c), 2. (a), 3. (b), 4. (d).

● We Learnt and Understood-III

A.

Conversation based question:

- (a) Schools were small and had fewer facilities. Children sat together in a varandah and teachers taught them on blackboards and there were no smart boards or computers.
- (b) Earlier, people travelled by bullock carts, cycles, or on foot. Today, we use cars, buses, trains, and aeroplanes which are faster and more comfortable.
- (c) Old-time houses were made of mud, wood, and straw and had open courtyards. Today's houses are made of cement, bricks, and concrete with modern facilities like fans, ACs, and attached bathrooms.
- (d) Earlier, people followed traditional dress, food, music, and festivals strictly. Now, many people wear modern clothes and mix new styles with old traditions. Traditional music and dance are now also shown on TV and stage.
- (e) Old games like gulli-danda, kabaddi and kho-kho were played outdoors. Now children play video games, mobile games, and indoor games like chess and carrom.

18 Answer Key

- (f) Due to climate change, summers are hotter and winters shorter. People use more fans, coolers, and ACs. Crops are affected, diseases are increasing, and we need to change our food, clothes, and daily habits accordingly.
- B.**
- (b) Slate and wooden plate
 - (a) Bullock cart
 - (b) Himalaya
 - (c) Dry climate
- 2.** 1. lamp, 2. stepwell, 3. bus, 4. Ganga, 5. direction, 6. trunk, 7. cold, 8. tanks
- 3.** 1. False, 2. True, 3. False, 4. False
5. True, 6. False, 7. True, 8. True
- 4.**
- | Old Things | New Things |
|------------------------------|-----------------------|
| 1. Oil lamp | LED light |
| 2. Bullock cart | Bus |
| 3. Mud house | Cement-concrete house |
| 4. Well | Tube well |
| 5. Sending letters/ messages | E-mail |
- 5.**
- Earlier schools were held under trees or in small buildings with fewer facilities. Today's schools have better infrastructure, smart classes, and more learning resources.
 - In the old days, people used oil lamps, lanterns, or candles to light up their homes at night.
 - Old transport means like bullock carts and horse-carts were slow and took time. Modern transport like cars, trains, and aeroplanes is much faster and more comfortable.
 - The main cause of climate change is the increase in pollution and greenhouse gases due to human activities like deforestation and urbanisation.
 - While reading a map, we should check the direction, scale, symbols, and

legend to understand the location and distance correctly.

- While using mobile phones, we should avoid overuse, keep it away from our eyes, and not use it while walking or crossing roads.
- In summer, drink plenty of water and avoid the sun; in winter, wear warm clothes; in the rainy season, avoid getting wet and keep surroundings clean to prevent diseases.
- Transport helps us move from one place to another, and communication connects us with people and information instantly, making life easier and faster.
- Windmills work by using wind energy to rotate large blades, which turn a generator and produce electricity.
- Water conservation is important because water is limited and essential for drinking, farming, and daily use, and wasting it can lead to scarcity.

13. Municipal Self-Governance and Our Responsibility

| EXERCISE |

- A.**
- (b) Blue coloured dustbin
 - (a) Green coloured dustbin
 - (b) Blue coloured dustbin
- B.**
- (a) municipal council municipal corporation, municipality
 - (b) close taps properly and use water wisely
 - (c) roads, parks and street lights
- C.**
- (a) False, (b) True, (c) False, (d) True, (e) False, (f) True, (g) False
- D.**

Column A	Column B
Municipal Corporation	Big city
Municipal Council	Small city

Mayor	Head of the Municipal Corporation
Councillor	Ward representative
Sarpanch	Village Panchayat

- E. (a)** 1. Turn off taps when not in use.
2. Use a bucket instead of a shower for bathing.
- (b)** 1. Always cross the road at the zebra crossing.
2. Follow traffic signals and look both ways before crossing.
- (c)** 1. Do not scribble or paste posters on public walls.
2. Use parks, benches, and streetlights responsibly.
- (d)** 1. Water them regularly and protect them from damage.
2. Avoid stepping on or plucking their leaves and flowers.
- F.** Do it yourself.

| ADDITIONAL QUESTIONS |

- A.** 1. (b), 2. (c), 3. (c), 4. (c), 5. (d).
B. 1. Brihanmumbai Municipal Corporation, 2. pollution, 3. wet and dry, 4. air.
C. 1. False, 2. True, 3. False, 4. True.
D. 1. (b), 2. (a), 3. (c), 4. (e), 5. (d).

**14. Pranayama –
A Gift for Body and Mind**

| EXERCISE |

- A.** 1. (b) Both a and b
B. 1. mind
2. improves
3. Kapalbhathi
C. 1. False
2. True
3. False
D. 1. 1. Bhastrika, 2. Anulom-Vilom,
3. Kapalbhathi, 4. Bhramari.

2. Pranayama improves lung capacity and strengthens the respiratory system, boosting physical health. It also helps reduce stress, anxiety, and improves focus and sleep. It makes the mind calm and the body energetic.
3. Panch kosha refers to the five interconnected layers of human existence according to yogic philosophy. These layers are :
- Annamaya Kosha (Physical Sheath)
 - Pranamaya Kosha (Energy/Breath Sheath)
 - Manomaya Kosha (Mental Sheath)
 - Vijnanamaya Kosha (Intellectual Sheath)
 - Anandamaya Kosha (Spiritual Sheath)
- E.**
- Annamaya Kosha Physical Level
 - Pranamaya Kosha Energy Level
 - Manomaya Kosha Mental Level
 - Vijnanamaya Kosha Intellectual Level
 - Anandamaya Kosha Spiritual Level

- F.** Do it yourself.

| ADDITIONAL QUESTIONS |

- A.** 1. (b), 2. (b), 3. (d), 4. (e), 5. (c).
B. 1. Bhastrika, 2. empty, 3. Pancha Kosha, 4. Anandamaya.
C. 1. False, 2. True, 3. True, 4. False.
D. 1. (b), 2. (a), 3. (e), 4. (c), 5. (d).

15. Our Inspirers

| EXERCISE |

- A.** 1. (b) Pipasar
2. (c) Both (a) and (b)
B.

Column A	Column B
Govind Guru	Social Awareness
Mangarh Hill	Banswara, Rajasthan
17 November 1913	Attack on the British Army

20 Answer Key

Year 2022	Declared Mangarh a National Monument
Guru Jambhoji	Code of 29 rules
Bishnoi Sect	Promoter of Environmental Protection
Khejarli Village	Sacrifice of 363 people

C. 1. True, 2. False, 3. False, 4. True, 5. True, 6. True, 7. False, 8. False, 9. True, 10. True

D. 1. Samp (Unity)
2. 1500
3. Mangarh
4. National Memorial
5. Pipasar
6. Bishnoi
7. 29
8. Sabdawani

E.

- Guru Jambhoji taught people to protect trees, conserve water, and do no harm to animals. He promoted the planting of trees and took initiative to build ponds.
- The rules include protecting trees and wild animals, avoiding harm to living beings, and conserving natural resources like water and air.
- In 1730, 363 Bishnois led by Amrita Devi sacrificed their lives to protect Khejri trees from being cut down in Khejarli village.
- His teachings promote love for nature, protect the earth for future generations and living in harmony with all beings.
- We can protect trees, avoid plastic use, conserve water, and treat animals and nature with respect and kindness.
- Govind Giri asked, "what can we do to make our society more aware and strong?" Maharshi Dayanand Saraswati replied that our duty is to spread

education, equality and idea of self-dependence.

- Maharshi Dayanand Saraswati founded the Paropkarini Sabha to spread education, awareness about character building and community service.
- His ideas of nationalism, social reform and his emphasis on Vedic values and independence deeply influenced them.
- He worked to reform the villages through education, community welfare and inspired people to adopt self-reliance and follow a life based on truth and moral values.

F. Do it yourself.

| **ADDITIONAL QUESTIONS** |

- A.** 1. (c), 2. (c), 3. (b), 4. (c), 5. (c).
B. 1. Mangarh, 2. Bishnoi, 3. Jallianwala Bagh, 4. non-violence.
D. 1. False, 2. True, 3. False, 4. True.
E. 1. (c), 2. (a), 3. (b), 4. (d), 5. (e).

16. My Rajasthan

| **EXERCISE** |

- A.** 1. (a) Kalbeliya
2. (b) For water conservation
3. (d) All of the above
4. (d) Canals
5. (a) Traditional stories
- B.** 1. True, 2. False, 3. False, 4. True, 5. True.
- C.** 1. Bhavai, 2. Brahma, 3. Naadi, 4. Tanka
- D.** 1. The main folk dances are :
a. Ghoomar
b. Kalbeliya
c. Bhavai
d. Gair
- Puppet art is important for telling traditional stories, history, morals spreading social messages.
 - Rajasthan uses traditional methods like

Johad, Tanka, Naadi, and Baori to store rainwater. These help in conserving water in desert areas which are both effective and sustainable.

4. Neem is used to :

- treat oral infections
- treat skin disorders

It has antibacterial and antifungal properties.

5. Ashwagandha helps in reducing mental stress and boosting immunity. It also improves physical strength and energy levels.

E. 1. Rajasthan is famous for its colourful and energetic folk dances and music.

- Ghoomar is performed by women in colourful ghaghras, gracefully in circular movements.
- Kalbeliya dance mimics the movements of snakes and is performed by the Kalbeliya community.
- Bhavai dance shows the skill of balancing multiple pots on the head while dancing.
- Gair is a male group dance performed during Holi and other festivals.

Rajasthan's folk music is also an inseparable part of its culture. Songs like Maand, Panihari and Badhaava express love, bravery and devotion.

2. Traditional water conservation methods in Rajasthan are vital due to the state's dry and desert climate. These techniques have helped communities survive for centuries.

Examples include:

- **Baori (Stepwell):** Deep wells with steps to store rainwater.
- **Johad:** Small, man-made lake that recharges groundwater.
- **Naadi:** Traditional village reservoir, made from mud and stone used for storing rainwater.

- **Tanka:** A small tank built in homes to collect rainwater.

These systems are eco-friendly, low-cost, and promote water sustainability even today.

3. Rajasthan's traditional medical system uses herbs and plants found locally in the desert.

- **Neem** is used for blood purification and treating skin disorders.
- **Tulsi** is used for boosting immunity and curing cough and cold.
- **Aloe vera** is applied to burns and skin issues.
- **Ashwagandha** helps reduce stress and strengthens the body.

These natural remedies are still in use and are part of Ayurvedic and folk medicine traditions.

4. Rajasthan's cultural traditions like festivals, folk dances, music, puppet shows, and community gatherings bring people together. For example:

- **Folk dances** involve group participation, strengthening bonds.
- **Puppet shows** and folk songs pass moral values and history from one generation to another.
- **Community water** systems like baoris and johads are maintained collectively, promoting teamwork.

Such traditions maintain harmony and preserve the rich heritage of Rajasthan.

F. Do it yourself.

| ADDITIONAL QUESTIONS |

- A. 1. (b), 2. (b), 3. (b), 4. (c), 5. (b).
 B. 1. Bhavi, 2. Tulsi, 3. Johad, 4. Tanka.
 C. 1. True, 2. True, 3. False, 4. False.
 D. 1. (c), 2. (a), 3. (b), 4. (e), 5. (d).

● We Learnt and Understood-IV

A. Do it yourself.

B.

1. 1. (d) All of the above

2. (d) All of these

3. (d) Both a and b

4. (c) Both a and b

5. (b) Increases immunity

6. (a) Promotion of the Vedas

2. 1. Baori and Johad

2. bullock carts, camels and horse-carts.

3. 3214 km

4. 2933km

5. Mayor

6. dustbin

7. protect

8. trees, animals and water

9. Arya

10. Govind Guru

3.

1. Municipality (b) Cleans the city

2. Mayor (a) Head of the Municipality

3. Stepwell (e) Means of water conservation

4. Plastic Waste (c) Should be placed in the blue bin

5. Guru Jambhoji (d) Nature and social reformer

6. Amrita Devi (g) Leader of the tree conservation movement

7. Arya Samaj (f) Promotes the teachings of the Vedas

4.

1. False, 2. True, 3. False, 4. True, 5. True,

6. False, 7. True, 8. False, 9. False, 10. False,

11. True, 12. False, 13. True, 14. False.

5.

1. Birds build nests to lay eggs and protect their young ones. They collect materials like twigs, leaves, feathers, and mud from their surroundings.

2. A wedding in the village would become difficult and less joyful without collective help. Sharing tasks and responsibility makes such events successful and memorable

3. One should avoid sharing personal information and never talk to strangers online. Always use secure websites and avoid clicking on suspicious links.

4. Ants work together and carry soil particles to construct their ant hills. They dig tunnels and create chambers inside for storing food.

5. Old transport like bullock-cart were slow and used animals, while modern transport like trains and aeroplanes are faster and use engines or fuel.

6. Northern states- Punjab and Uttarakhand
Southern states- Kerela and Tamil Nadu.

7. A Municipality manages the cleanliness, water supply, street lightning, and other civic facilities of the small and medium-sized cities.

8. Electricity and water are limited resources. Saving them helps protect environment and ensures their availability for future generation.

9. Rainwater harvesting and buildings stepwells or Johads are common water conservation methods.

10. Pranayama helps reduce stress, improves concentration, and strengthens the lungs and immune system.

11. He founded Arya Samaj and promotes the teachings of the Vedas. He spread awareness about character building, ethical living and community service.

12. Deforestation, Urbanisation and pollution from factories and vehicles are major causes of climate change.

13. Deforestation occurs due to urbanisation, logging, agriculture, and construction of roads and dams.

14. Plastic is mostly used in bottles, food containers, shopping bags, and packaging materials in homes.